
PAPERS, REPORTS, PRESENTATIONS & PROFESSIONAL PROCEEDINGS

"Telecommunications Trade and Investment Opportunities in China and India," presented to the Massachusetts Telecommunications Council, Boston, February 1995.

"The Strategic Implications of Interactive Broadband Telecommunications Networks for Competition and Public Policy," presented to the National Communications Forum, Chicago, September 1994.

"Competitive Implications of Vertical Relations between Equipment Vendors and Telecommunications Services: Lessons from the French Experience," with Joanne Oxley, presented to European Regional Conference of the International Telecommunications Society, Stenungsbaden, Sweden, June 21, 1993.

"Obtaining Competitive Intelligence and Creating Competitive Advantage through the Public Policy Process," with Steven Harris, invited paper, Annual Conference of the Society for Competitive Intelligence Professionals, Los Angeles, April 2, 1993.

"Deployment and Adoption of Integrated Services Digital Network in the U.S.: Progress and Public Policy Obstacles," with Luis Enriquez, invited paper, Twenty-Fourth Annual Conference, Michigan State University Institute of Public Utilities, Williamsburg, Virginia, December 8, 1992.

"Market Definition and Market Power in the Sports and Entertainment Industry," invited presentation, Antitrust Section, American Bar Association Annual Proceedings, San Francisco, August 1992.

"The Design of Incentive Regulation for Telecommunications," invited presentation, Conference on Alternative Regulation, Illinois Commerce Commission, Chicago, July 1992.

"The Effects of Public Policies on ISDN Deployment and Adoption in the U.S.," presented to International Telecommunications Society, Cannes, France, June 1992.

"Removing the MFJ Restriction on InterLATA Services," invited testimony, Subcommittee on Telecommunications & Finance, U.S. House of Representatives, Washington D.C., May 1992.

"The Implications of Telecommunications Infrastructure Investment for R&D, Innovation and Competitiveness," invited testimony, Subcommittee on Communications, U.S. Senate, Washington D.C., February 1992.

"Principles of Costing and Pricing for Telecommunications Regulatory Policy," invited testimony, Colorado Public Utilities Commission En Banc Hearing, Denver, February 1992.

"Deregulation and Interstate Bank Entry in California," with Lee Burke, Research Report of the California Policy Seminar, UC Berkeley, April 1991.

"Assessing the Future of Telecommunications in the Global Economy," invited address, California Telephone Association, Monterey, CA, February 1991.

"Economic Rationale for a National Fiber Optic Infrastructure," invited address, Congressional Staff Forum on Telecommunications (sponsored by Ameritech), Washington D.C., February 1991.

"Applications of Incentive Regulation: An International Comparison," invited presentation, Conference of California Public Utilities Counsel, Long Beach, CA, October 1990.

"The Role of Telecommunications in Regional Economic Development," invited address, Rocky Mountain State Leaders Conference, Billings, Montana, October 1990.

"Telecommunications and Public Policies in the Global Market," invited address, Carnegie Council, New York, NY, October 1990.

"Why We Need a National Telecommunications Policy: A Comparative Perspective," invited address, Policy Issues Management Conference, Bell Communications Research, Murray Hill, NJ, October 1990.

"Incentive Regulation for Telephone Utilities," invited presentation, Workshop of the Colorado Public Utilities Commission, Denver, September 1990.

"The Role of Telecommunications Policy," invited lecture, Conference on Economic Development in the Pacific Northwest, Portland, Oregon, September 1990.

"The Changing Economics of Telecommunications: Implications for U.S. Policy and Competitiveness," invited briefing of U.S. Congressional staff on telecommunications (sponsored by Pacific Telesis), San Francisco, August 1990.

"Communications Competitiveness and Infrastructure Modernization Act of 1990," invited testimony, Communications Subcommittee, U. S. Senate, Washington D.C., July 1990.

"Investing in America's Future," invited essay, 1989 Annual Report of Southwestern Bell Corporation, St. Louis, 1990.

"The Public Switched Telephone Network and Rural Economic Development," invited lecture, Montana State Leaders' Conference, Helena, April 1990.

"Is Public Policy Meeting the Needs of Consumers?" invited panelist, Conference on Telecommunications Technologies and Policies, Center for Communications and Information Science & Policy, University of Pennsylvania, March 1990.

"Telecommunications as a Strategic Industry," invited address, New England Council, Boston, February 1990.

"Fiber to the Customer: A Public Policy Perspective," invited paper, Western Communications Forum, San Diego, February 1990.

Session Chair and Moderator, "State Regulatory Reform: Recent and Future Trends," Fifth Conference on State Telecommunications Regulation, University of Utah, Salt Lake City, January 1990.

Invited Panelist, "Crossroads of Information Technology," Board on Telecommunications and Computer Applications, National Academy of Engineering, Washington D.C., October 1989

Invited panelist in the "Industry Forum," Annual Meeting of the U.S. Telephone Association, San Francisco, October 1989.

"Strategic Lessons from Deregulated Industries," paper presented to Strategic Management Society, San Francisco, October 1989.

"Deregulation in the Transportation Industries: Lessons for Telecommunications Managers," invited paper, Center for Telecommunications Management, University of Southern California, October 1989.

"Price Cap Regulation and Economic Forecasting," invited presentation to 1989 National Forecasting Conference, Bell Communications Research, San Francisco, May 1989.

"The Strategic Implications of Telecommunications Deregulation in Europe," invited presentation, Strategic Management Society, Amsterdam, October 1988.

"Telecommunications Deregulation: Implications for the California Economy," invited presentation, California Foundation for the Environment and the Economy, Carmel, June 1988.

"A Comparison of U.S. and Japanese Policies toward Information Technologies," invited presentation, International Public Economics Association, Tokyo, May 1988.

"Information Technologies, Public Policy, and Regional Economic Development," invited address, Conference on Regional Development in Japan, Hokkaido University, Sapporo, Japan, May 1988.

"The Implications of Line-of-Business Regulation for Diversification Strategy & Enterprise Structure," presented to Strategic Management Society, Boston, October 1987.

"Alternative Regulatory Frameworks for Local Exchange Carriers," invited presentation, En Banc Hearing of the California Public Utility Commission, September 1987.

"Emerging Telecommunications Policies in Europe," Briefing of California Legislative Leaders, Los Angeles, September 1987.

"Japanese Corporate Philanthropy in the United States," presented to Academy of Management, New Orleans, August 1987; Center for Research in Management Working Paper BPP-23; published in summary form in *Strategic Directions*, with Barbara Lombardo and David Vogel, April 1989.

"The Effects of Deregulation on Competition and Competition Policy in Banking: A Review of the Literature," Working Paper No. 4, National Center for Financial Services, Berkeley, August 1987.

"Competitive Strategies under Regulatory Constraint: Implications of the AT&T Divestiture on Vertical Relations in Telecommunications," with David J. Teece, paper presented to Strategic Management Society, Singapore, 1986.

"The Economic Consequences of Deregulation," invited address, Emerging Issues Program, Conference of National State Legislative Leaders, Los Angeles, September 1986.

"Public Policies toward Utility Diversification: An Overview," invited presentation, California Policy Seminar/California Senate Office of Research, Berkeley, April 1986.

"New Technologies for Local Loop Access: An Economic and Regulatory Analysis," with Gary Pisano, Office of Technology Assessment, United States Congress, June 1985.

"Corporate Community Involvement in the Greater San Francisco Bay Area," with D. Vogel and J. Logsdon, Center for Research in Management Working Paper, Berkeley, May 1985.

"The Future of Telecommunications Regulation," invited presentation, En Banc Hearing of the California Public Utilities Commission, San Francisco, November 1984.

"Testimony in Support The Taxpayer Antitrust Enforcement Act," Judiciary Committee, U.S. Senate, May 1984.

ADMINISTRATIVE POSITIONS, UNIVERSITY OF CALIFORNIA**WALTER A. HAAS SCHOOL OF BUSINESS**

Chair, Business and Public Policy Group (1983-84, 1986-93).
Policy and Planning Committee (1986-88; 1991-93); Chair (1987-88; 1992-93).
Chair, Program in Business and Social Policy (1986-90).
Business School Building Program Committee (1986-91).
Ph.D. Field Advisor, Business and Public Policy (1981-87; 1989-91).
Policy and Planning Committee (1991-3; Chair, 1992-93).
Member, Board of Directors, Washington Campus Program (1990-93).
Director, The Executive Program (1983-85).
Director, Executive Programs in Telecommunications (1989-92).
Chair, Executive Education Task Force (1991-93).
Member, Board of Directors, Berkeley Center for Executive Development

UNIVERSITY OF CALIFORNIA, BERKELEY

Executive Committee, Center for Research in Management (1989-).
Advisory Board, Lester Center for Innovation and Entrepreneurship (1992-).
Chancellor's Advisory Committee on Parking (1988-89).
Executive Committee, National Financial Services Center (1986-88).
Executive Committee, Institute of Transportation Studies (1981-83).
Director, Center for Transportation Policy Research (1980-2).

UNIVERSITY OF CALIFORNIA, SYSTEMWIDE

Working Group on Technology Transfer (1988-90).
Task Force on Telecommunications and Information Policy Research (1984-85).

PROFESSIONAL AFFILIATIONS

American Economic Association
Academy of Management
Strategic Management Society
International Telecommunications Society
Association of Public Policy Analysis and Management

SERVICE TO PROFESSIONAL JOURNALS, SOCIETIES & PUBLIC AGENCIES

Governor's Ad Hoc Committee, Golden State Quality Awards (1991-92)
Chair, Ninth Annual International Conference of the Strategic Management Society, 1989, San Francisco
Associate Editor, California Management Review
Associate Editor, Logistics and Transportation Review
Editorial Advisory Board, Transportation Research
Session organizer, Telecommunications Policy Research Conference (1988, 1989)
Session organizer, Academy of Management (1991).
Reviewer/Referee: Bell/RAND Journal of Economics; Industrial and Corporate Change; Journal of Asian Economics; Journal of Economics and Business; Journal of Public Policy Analysis & Management; Journal of Regulatory Economics; National Science Foundation; Quarterly Review of Economics and Business; Review of Economics and Statistics; Telecommunications Policy.

CONSULTING & TESTIMONY

Economic Consulting to Public Agencies:

California Department of Consumer Affairs (industry analysis; telecommunications policy); California Office of Attorney General (antitrust analysis in tire industry, merger analysis in food retailing industry, resale price maintenance in consumer electronics, infant formula pricing); California Public Utilities Commission (teach regulatory economics & policy to Commission staff); Interstate Commerce Commission (rate regulatory policy, merger policy, costing methodology); Office of Technology Assessment (telecommunications policy); U.S. Department of Transportation (railroad industry rationalization, merger policy); U.S. General Accounting Office (transportation policy).

Economic Consulting/Regulatory Expert Testimony to Private Enterprise:

Pacific Bell (product pricing, competitive strategy, regulatory policy, broadband deployment, MFJ interLATA relief); US WEST (regulatory policy, costing and pricing principles); Ameritech (price regulation; local competition policy); General Telephone (pricing, regulatory policy); Western Coal Traffic League (railroad pricing); Consolidated Freightways (motor carrier pricing); Southern Pacific Transportation Co. (route rationalization analysis; rail merger analysis; pricing of trackage rights); American Presidents Intermodal Co. (competition policy, merger analysis); Bell Communications Research (R&D policy analysis); Bell Atlantic (price regulation, cable rate regulation; cellular telephone joint venture); Southwestern Bell (price regulation, local competition policy); BellSouth (price regulation, local competition policy); NYNEX (FCC spectrum auction rules); United States Telephone Association (FCC price regulation); MFJ Task Force (MFJ manufacturing relief).

Economic Consulting/Business Litigation Expert Witness Testimony:

Electrical contracting; biotechnology manufacturing equipment; pipe fabrication; vision care services; electronic lighting ballasts; motion picture production, distribution and exhibition; regional shopping center development; semiconductor manufacturing equipment; digital-analog converters; workmen's compensation insurance; semiconductor manufacturing; semiconductor manufacturing.

PRIOR/OTHER EMPLOYMENT

Deputy Director, Cost, Economic and Financial Analysis, Bureau of Accounts, Interstate Commerce Commission, Washington, D.C. (on leave, University of California); (1980-81).
Director, ARTRAIN (traveling art education exhibit), Michigan Council for the Arts, Detroit, (1971-72).
President, Young America Corporation (direct marketing of specialty products), St. Louis (1969-71).
Public Relations Consultant (TIME, Inc.; Rockefeller for President Committee; Young Citizens for Humphrey; Student Coalition for Congressional Action), New York and Washington D.C. (1967-69).
Vice President, National Student Marketing Corporation, Washington D.C. (1966-67).
Staff Assistant, Office of the Governor, State of Oregon, Salem (1966).
Public Relations Field Representative, General Motors Corporation, Warren, Michigan (1965).

ATTACHMENT C

November 20, 1995

U 1001 C
Advice Letter No. 17879

Advice Letter Compliance Filing for Co-Carrier Interconnection Agreement
Public Utilities Commission of the State of California

Pacific Bell (Pacific) attaches for filing the Co-Carrier
Interconnection Agreement appended hereto.

We are submitting this Agreement in compliance with Decision
No. 95-07-054, July 24, 1995, ~~minco~~, p. 37, where the Commission said:

"Accordingly, in those cases where CLCs are able to reach mutually agreeable terms and conditions for interconnection including compensation, the negotiating parties are free to execute such interconnection agreements without the need for Commission-imposed rules on terms and conditions.*

*Footnote 8. Commission approval of such mutually agreed on interconnection and compensation arrangement should be sought via an advice letter. Commission review will ensure that the arrangement is not unduly discriminatory nor anti-competitive."

The Co-Carrier Interconnection Agreement with MFS Intelnet of California, Inc. (MFS) is an important step in establishing local competition in California. It covers the following important areas:

-It allows immediate interconnection of MFS and Pacific networks for the exchange of local calls in a seamless manner. It calls for the use of "one-way" trunk groups by MFS and Pacific to facilitate network management, and establishes mutually agreed to meet points for interconnection.

-MFS will match the Commission approved "rating areas" for the rating of local and toll calls in Pacific's serving area. MFS will have access to NXX codes, and Pacific will not charge MFS for opening these codes in Pacific's switches.

PACIFIC BELL

-MFS will jointly provide switched access to allow customers and interexchange carriers to complete, or originate, toll calls over the MFS and Pacific networks. The Agreement provides for the sharing of switched access charges consistent with industry standards for jointly provided switched access services.

-Pacific and MFS have agreed to reciprocal compensation for local traffic at a rate of \$.0075 per minute. Rates comparable to Pacific's switched access rates will apply for the completion of intraLATA toll calls, and a rate of \$.0087 per minute applies to calls completed through interim number portability services.

-Pacific will allow access to a number of its support services under the Agreement. Access to E911, directory assistance, directory listing and call referral services is permitted. Additional services covering 900/976, and certain operator functions are also addressed.

-Resale of Pacific's unbundled links (loops) is also permitted beginning April 1, 1996. Prices are established for business and residence links based on geographic zones in California. The Zone 1 Basic Business Link rate is \$12.50 (including EUCL and CCL component). In addition, Pacific and MFS have agreed to non-recurring charges and coordination process for installation of Links.

-Interim number portability is provided through Pacific's Directory Number Call Forwarding Service (DNCF) at a rate of \$3.25 per month. In addition, non-recurring charges have been agreed upon.

The revenue effects of this Agreement on Pacific are uncertain and will depend upon a number of factors and future events. For that reason, we can only provide an estimated range of revenue effect. Pacific's estimate of that range is a loss of (annual effect) (\$9M - \$14M). This estimate is for this contract only, and does not include the broader revenue effects of local competition and related events.

Consistent with the Commission's contracting rules, Pacific will make the terms and conditions of this filing available to similarly situated CLCs for interconnection to Pacific's network.

In compliance with Section III.G of General Order No. 96-A, we are mailing a copy of this advice letter and Agreement to competing and adjacent Utilities and/or other Utilities, and interested parties. In addition, we are mailing copies to parties (lists attached) who filed testimony or comments in the Commission's Local Competition (R.95-04-043), Universal Service (R.95-01-020) or OANAD (R.93-04-003) proceedings.

PACIFIC BELL

This filing will not increase any existing rate or charge, cause the withdrawal of service nor conflict with any other schedules or rules.

Anyone may protest this advice letter to the California Public Utilities Commission. The protest must set forth the specific grounds on which it is based, including such items as financial and service impact. A protest must be made in writing and received within 20 days of the date this advice letter was filed with the Commission. The address for mailing or delivering a protest to the Commission is:



Chief, CACD Telecommunications Branch
505 Van Ness Avenue, Room 3203
San Francisco, CA 94102

A copy must be mailed to the undersigned utility on the same date it is mailed or delivered to the Commission.

We ask that this advice letter become effective January 1, 1996.

Yours truly,

PACIFIC BELL



Executive Director

Attachments

PACIFIC BELL

PUBLIC UTILITIES COMMISSION
R.95-04-043/I.95-04-044

SERVICE LIST

Maureen A. Swift
Director Of Reg. Affairs
ACC NATIONAL TELECOM CORP.
400 West Avenue
Rochester, NY 14611

J. Scott Nicholls
Sr. Manager-Reg. Affairs
ALLNET COMMUNICATIONS
SERVICES
1990 M St., N.W., Ste. 500
Washington, DC 20036

Cecil O. Simpson, Jr., Gen.
Atty.
Regulatory Law Office
DEPARTMENT OF THE ARMY/FEA
901 North Stewart Street
Arlington, VA 22203-1837

Mary Krutchen, V.P.
BANK OF AMERICA
P.O. Box 37000, Dept. 5856
San Francisco, CA 94137

Stephen P. Bowen
BLUMENFELD & COHEN
101 California St., Ste. 4225
San Francisco, CA 94111

Alan Gardner/Glen Semow
Regulatory & Legal Dept.
CALIFORNIA CABLE T.V. ASSN.
P.O. Box 11080
Oakland, CA 94611

Peter Casciato
8 California St., Ste. 701
San Francisco, CA 94111

Richard C. Nelson
AIRTOUCH COMMUNICATIONS
1 California St., 9th Floor
San Francisco, CA 94111

Julia Russo
Director of Regulatory
Affairs
AMTEL COMMUNICATIONS, INC.
4025 Pleasantdale Rd.,
Ste. 545
Atlanta, GA 30340

Karen M. Potkul, Atty.
AT&T
795 Folsom St., Rm. 625
San Francisco, CA 94107

Jeffrey F. Beck
Jillisa Bronfman
BECK & ACKERMAN
Four Embarcadero Center,
Suite 760
San Francisco, CA 94111

Donald Sessaman
Exec. V.P.
BROOKS FIBER COMMUNICATIONS
10316 Placer Lane
Sacramento, CA 95827

Hong-Sze Yu
CARROLL BURDICK & MCDONOUGH
44 Montgomery St., Ste. 400
San Francisco, CA 94104-4606

Susan M. Redner
Associate General Counsel
CITIZENS UTILITIES COMPANY
Three High Ridge Park
Stamford, CT 06905

Jacqueline R. Kinney, Atty.
CITIZENS UTILITIES COMPANY
OF CALIFORNIA
8920 Emerald Park Dr., Ste. G
Elk Grove, CA 95624

Thomas J. Burke
CONTEL OF CALIFORNIA, INC.
5300 District Blvd.
Bakersfield, CA 93313

E. G. Black/M. Schreiber
COOPER WHITE & COOPER
201 California St., 17th Flr.
San Francisco, CA 94111

Joseph S. Faber
DAVIS WRIGHT TREMAINE
235 Pine St., 15th Floor
San Francisco, CA 94102

David Carter, President
DIALINK
164 E. Dana Street
Mountain View, CA 94041-1508

T. M. Eagan/R. M. Ward
EAGAN & WARD
1024 10th Street, Ste. 300
Sacramento, CA 95814-3514

Allan C. Hubbard, Counsel
FAIRCHILD COMMUNICATIONS
SERVICES COMPANY
P.O. Box 10804
Chantilly, VA 22021

Thomas J. MacBride, Jr.
John L. Clark
GOODIN MACBRIDE SQUERI
SCHLOTZ
505 Sansome St., 9th Floor
San Francisco, CA 94111

Ken McEldowney, Exec. Dir.
CONSUMER ACTION
116 New Montgomery St.,
Ste. 233
San Francisco, CA 94105

Jeremy Stern, V.P.
CONTINENTAL CABLEVISION
550 N. Continental Blvd.,
Ste. 250
El Segundo, CA 90245

Roger P. Downes
COX CALIFORNIA PCS, INC.
2381 Morse Avenue
Irvine, CA 92714

Gregory J. Kopta
DAVIS WRIGHT TREMAINE
2600 Century Square
1501 Fourth Avenue
Seattle, WA 98101

Laura H. Phillips, Esq.
Peter A. Batacan, Esq.
DOW LOHNES & ALBERTSON
1255 23rd St., N.W.
Washington, DC 20037-1194

Ellen Deutsch, Chief Counsel
ELECTRIC LIGHTWAVE, INC.
8100 N.E. Parkway Drive
Vancouver, WA 98662

J. Scott Bonney, V.P.
Regulatory & External Affairs
FIBERLINK
2433 Carillon Point
Kirkland, WA 98033

Martin A. Mattes
Suzanne E. Curtis
One Maritime Plaza, 3rd Floor
San Francisco, CA 94111

Richard E. Potter, Esq.
GTE WEST COAST INCORPORATED
1800 41st Street
Everett, WA 98201

Carol Lam, Regional Manager
Regulatory & Industry Affairs
GTE CALIFORNIA, INC.
711 Van Ness Ave., Ste. 300
San Francisco, CA 94102

Thomas Bugbee, Chief
Regulatory Affairs
COUNTY OF LOS ANGELES
P.O. Box 2231
Downey, CA 90242

Robert J. Metzger, Director
Department of General
Services
CITY OF LONG BEACH
333 West Ocean Blvd.,
12th Floor
Long Beach, CA 90802

William Harrelson
MCI TELECOMMUNICATIONS CORP.
201 Spear Street, 9th Floor
San Francisco, CA 94105

Mary E. Wand
MORRISON & FOERSTER
345 California St.,
30th Floor
San Francisco, CA 94104-2675

Jose E. Guzman, Esq.
NOSSAMAN GUTHNER KNOX
AND ELLIOTT
50 California St., 34th Floor
San Francisco, CA 94111

Judith Endejan/Susan Rossi
Associate and General Counsel
GTE CALIFORNIA, INC.
One GTE Place, CA500LB
Thousand Oaks, CA 91362

Jack Burk, President
5441-IEC
INTEGRATED TELESERVICES, INC.
1915 North Fine St., Ste. 101
Fresno, CA 93727

D. F. Brent, Dir.-Reg.
Affairs
Pacific Region
LDDS COMMUNICATIONS, INC.
9300 Shelbyville Rd.,
Ste. 700
Louisville, KY 40222

Kurt Maass
5400 Carillon Point
Kirkland, WA 98033

Eric A. Artman
MFS INTELENET, INC.
Suite 5100
185 Berry St., Building One
San Francisco, CA 94107

Larry L. Sampson
NATIONAL EXCHANGE CARRIERS
ASSN. (NECA)
1320 Willow Pass Rd.,
Ste. 550
Concord, CA 94520

Andrey P. Rasmussen
O'CONNOR & HANNAN, L.L.P.
Suite 800
1919 Pennsylvania Avenue,
N.W.
Washington, DC 20006-1400

Fred W. Daniel
ORION TELECOM
P.O. Box 9227
Newport Beach, CA 92658-9227

Mark Savage
Carmella Castellano
PUBLIC ADVOCATES, INC.
1535 Mission Street
San Francisco, CA 94103

Earl Nicolas Selby
LAW OFFICES OF EARL NICOLAS
SELBY
420 Florence Street
Palo Alto, CA 94301

Florence J. Pinigis
Carol B. Herrington
SOUTHERN CALIFORNIA EDISON
CO.
2244 Walnut Grove Ave.,
Rm. 359
Rosemead, CA 91770

Andrew D. Lipman
Richard M. Rindler
SWIDLER & BERLINER
3000 K Street, N.W., Ste. 300
Washington, DC 20007

Andrew Isar
TELECOMMUNICATIONS RESELLERS
ASSOCIATION
P.O. BOX 2461
Gig Harbor, WA 98335

Michael Shames
Lisa Briggs
UTILITY CONSUMERS ACTION
NETWORK
1717 Kettner Blvd., #105
San Diego, CA 92101

Robert J. Gloistein
ORRICK HERRINGTON & SUTCLIFFE
Old Federal Reserve Bank
Bldg.
400 Sansome St.
San Francisco, CA 94111-3143

Joseph T. Garrity, Director
Regulatory and Legislative
Affairs
QWEST COMMUNICATIONS CORP.
555 Seventeenth Street
Denver, CO 80202

C. Edward Wolf, President
SENIOR UTILITY RATEPAYERS OF
CALIFORNIA, INC.
1718 Tradewinds Lane
Newport Beach, CA 92660

Patrick E. McMahon, Sr. Atty.
R. A. Purkey, Dir.-State
Reg.-W.
SPRINT COMMUNICATIONS CO.,
L.P.
1850 Gateway Drive, 7th Floor
San Mateo, CA 94404-2467

Michael A. Morris
TCG WESTERN REGION
201 N. Civic Dr., Ste. 210
Walnut Creek, CA 94596

Thomas J. Long
TOWARD UTILITY RATE
NORMALIZATION
625 Polk Street, Ste. 403
San Francisco, CA 94102

David Wilner
P.O. Box 2340
Novato, CA 94948-2340

Maia Ettinger, Reg. Counsel
WORKING ASSETS
701 Montgomery Street,
4th Floor
San Francisco, CA 94111

Jonathan Lakritz, CACD
California Public Utilities
Commission
505 Van Ness Avenue, Room 3-B
San Francisco, CA 94102

ALJ Thomas Pulsifer
California Public Utilities
Commission
505 Van Ness Avenue,
Room 5020
San Francisco, CA 94102

Assistant Director, CACD
California Public Utilities
Commission
505 Van Ness Avenue,
Room 3209
San Francisco, CA 94102

Denise M. Brady
Dept. of Public Works
CITY OF SAN FRANCISCO
875 Stevenson St., Rm. 460
San Francisco, CA 94103

Thomas J. Nied, Major
HQ AFC4A/JA
Dept. of the Air Force
203 W. Losey St., Rm. 3001
Scott AFB IL 62225-5222

Helen Mickiewicz
California Public Utilities
Commission
505 Van Ness Ave., Rm. 4007
San Francisco, CA 94102

Janice Grau
California Public Utilities
Commission
505 Van Ness Ave., Rm. 5023
San Francisco, CA 94102

David M. Wilson, Esq.
David A. Simpson, Esq.
YOUNG VOGL HARLICK & WILSON
425 California St., Ste. 2500
San Francisco, CA 94014

Karen Jones, CACD
California Public Utilities
Commission
505 Van Ness Avenue, Room 3-D
San Francisco, CA 94102

James McVicar
California Public Utilities
Commission
505 Van Ness Avenue,
Room 3200 -
San Francisco, CA 94102

Brad Barnum
OFFICE OF GOV'TAL AFFAIRS
CPUC-SACRAMENTO
1227 O Street, Ste. 404
Sacramento, CA 95814

Virginia J. Taylor
DEPARTMENT OF CONSUMER
AFFAIRS
Legal Services Unit
400 R Street, Suite 3090
Sacramento, CA 95814

Tracey F. Pirie
Administrative Analyst
City of Santa Barbara
P. O. Box 1990
Santa Barbara, CA 93102-1990

Ira Kalinsky
California Public Utilities
Commission
505 Van Ness Ave., Rm. 5027
San Francisco, CA 94102

Rufus Thayer
California Public Utilities
Commission
505 Van Ness Ave., Rm. 5123
San Francisco, CA 94102

Lionel B. Wilson
California Public Utilities
Commission
505 Van Ness Ave., Rm. 4300
San Francisco, CA 94102

Brian Chang
California Public Utilities
Commission
505 Van Ness Ave., Rm. 4007
San Francisco, CA 94102

Zenaida Conway
California Public Utilities
Commission
505 Van Ness Ave., Rm. 4003
San Francisco, CA 94102

David Shantz
California Public Utilities
Commission
505 Van Ness Ave., Rm. 4003
San Francisco, CA 94102

Rob Feraru
California Public Utilities
Commission
505 Van Ness Ave., Rm. 5303
San Francisco, CA 94102

Linda Burton
Sierra Telephone Co., Inc.
P. O. Box 219
Oakhurst, CA 93644

Norman Low
California Public Utilities
Commission
505 Van Ness Ave., Rm. 4007
San Francisco, CA 94102

John Chan
California Public Utilities
Commission
505 Van Ness Ave., Rm. 4003
San Francisco, CA 94102

Dale Piiru
California Public Utilities
Commission
505 Van Ness Ave., Rm. 4003
San Francisco, CA 94102

Tom Lew
California Public Utilities
Commission
505 Van Ness Ave., Rm. 4007
San Francisco, CA 94102

Kevin P. Timpane
878 Elizabeth Street
San Francisco, CA 94114

James Gurga, President
S.P.I.
1102 Via Tornasol
Aptos, CA 95003

APPEARANCES

Robert M. Zoglin, President
ABCO COMMUNICATIONS, INC.
5681 Redwood Drive
Suite 3
Rohnert Park, CA 94928

Scott A. White
ADNET TELEMANAGEMENT, INC.
14849 Firestone Blvd.
Suite 225
La Mirada, CA 90638

Walter J. Sleeth
AIRTOUCH CELLULAR
One California Street
San Francisco, CA 94111

Karen M. Potlail
A T & T
795 Folsom Street
Room 625
San Francisco, CA 94107

Jeffrey F. Beck, Jillisa Brunfman
BECK & ACKERMAN
One Market Plaza
3950 Spear Tower
San Francisco, CA 94105

Susan M. Redner, Atty.
CITIZENS UTILITIES COMPANY
Three High Ridge Park
Stamford, CT 06905

CITY OF LOS ANGELES
THE CITY COUNCIL
CITY HALL-Room 300
200 N. Spring Street
Los Angeles, CA 90012

Alvin Palavin/E. Black/Mark Schreiber
COOPER, WHITE & COOPER
201 California St.
17th Floor
San Francisco, CA 94111

J. Faber/M. Trincharo/D. Waggoner
DAVIS WRIGHT TREVANE
235 Pine Street
15th Floor
San Francisco, CA 94102

Shalley Bergum, Exec. Dir.
DEAF AND DISABLED TELECOMMUNICATIONS
PROGRAM
1939 Harrison St., Suite 520
Oakland, CA 94612

Ocail O. Simpson, Jr., Gen. Atty.
DEPART OF THE ARMY
OFFICE OF THE JUDGE ADVOCATE GEN.
901 North Stuart Street
Arlington, VA 22203-1837

Kathleen S. Blunt/Judith Endejan
GTE CALIFORNIA INC.
One GTE Place
CASOOLS
Thousand Oaks, CA 91362-3811

Richard McKenna, HOE03J36
GTE SERVICE CORPORATION
P.O. Box 152092
Irving, TX 75015-2092

ANNE J. LACHANCE, Atty.
1850 M Street, N.W
Suite 1200
Washington, DC 20036

Earl Nicholas Selby
IOG ACCESS SERVICES, INC.
c/o LAW OFFICES OF EARL NICHOLAS SELBY
420 Florence Street, Suite 200
Palo Alto, CA 94301

Edward J. Perez
LOS ANGELES CITY ATTORNEY'S OFFICE
1800 City Hall East
Los Angeles, CA 90012

J. Walter Hyer III
MOCAW CELLULAR COMMUNICATIONS, INC.
1750 Howe Avenue
Third Floor
Sacramento, CA 95825

Alan Pepper
MITCHELL, SILBERBERG & KNOPP
Trident Center
11377 West Olympic Boulevard
Los Angeles, CA 90064-1683

Larry Sampson
NATIONAL EXCHANGE CARRIER ASSOCIATION
1320 Willow Pass Road
Suite 550
Concord, CA 94520

Robert J. Gloistain
OSWICK, HERRINGTON & SUTCLIFFE
Old Federal Reserve Bank Building
400 Sansome Street
San Francisco, CA 94111-3143

Marlin D. Ard/Timothy S. Dawson
PACIFIC BELL
140 New Montgomery St., Room 1507
San Francisco, CA 94105

Mary B. Cranston/Megan W. Pierson
PILLSBURY MADISON & SUTRO
225 Bush Street
P.O. Box 78880
San Francisco, CA 94120

Mark Savage, Carmela Castellano
PUBLIC ADVOCATES, INC.
1535 Mission Street
San Francisco, CA 94103

Randy Chirn
SENATE ENERGY, UTILITIES AND
COMMUNICATIONS COMMITTEE
State Capitol, Room 408
Sacramento, CA 95814

Andrew D. Lipman/Russell M. Blau
SWIDLER & BERLIN, CHARTERED
3000 K Street
N.W. Suite 300
Washington, D.C. 20007

Thomas J. Long
TOWARD UTILITY RATE NORMALIZATION
625 Polk St., Suite 403
San Francisco, CA 94102

Lisa Briggs/Michael Shames
UTILITY CONSUMERS ACTION NETWORK
1717 Kettner Blvd.
Suite 105
San Diego, CA 92101-2532

Terry L. Wilson-Gray
UNIVERSAL LIFELINE TELEPHONE
SERVICE TRUST
1970 Broadway, Suite 650
Oakland, CA 94612

Armando Valdez, Ph.D.
VALDEZ & ASSOCIATES
Telecom. Education Trust/Policy Educator
10 Jordan Avenue
Los Altos, CA 94022

Michael B. Day/Jerome F. Cardalaris
WRIGHT & ALLISON
100 Bush St., Suite 225
San Francisco, CA 94104

ALJ Philip Weismehl
RM. 5008

ALJ John Wong
RM. 5019

DRA-Deputy Director/TELECOM
RM. 4101

STATE SERVICE
R95-01-020/
I95-01-021

Shawn Thompson, Sr. Project Engineer
Economic & Environmental Programs
CITY OF IRVINE
P.O. Box 19575
Irvine, CA 92713

Virginia J. Taylor, Staff Counsel
DEPARTMENT OF CONSUMER AFFAIRS
400 R Street #3090
Sacramento, CA 95814

Assistant Director-CACD
RM. 3209

James McVicar
RM. 3200

Patrick S. Bardsge/Helen M. Mickiewicz
LEGAL DIVISION
RM. 4300G

INFORMATION ONLY
R95-01-020/
I95-01-021

EDWARD LUNCAN
4149 Raya Way
San Diego, CA 92122-1603

Mr. Glen Sullivan, Attorney
SOUTHERN CALIFORNIA GAS COMPANY
633 W. Fifth St., Suite 5200
Los Angeles, CA 90071-2071

City of Escondido Planning Division
ATTN: Kristina Suszko
201 North Broadway
Escondido, CA 92025

Service List

W. Ettinger/R. Deutsch, Esqrs.
AT&T Communications of Calif.
795 Polsom Street
San Francisco, CA 94107

Robert B. Alexander, Jr.
620 "L" Street
Davis, CA 95616

Richard Strauss
All Utilities Auditing Company
1820 Park Newport, Suite 209
Newport Beach, CA 92660

Rick Jarrett
Alltel Corporation
2121 N California Blvd., Ste. 400
Walnut Creek, CA 94596

Rick McAllister
Alltel Corporation.
One Allied Drive
Little Rock, AR 72202

Tom MacBride, Jr., Atty. at Law
Armour, Goodin, Schlotz, MacBride
505 Sansome Street, Suite 900
San Francisco, CA 94111

James Armstrong, Gen. Attorney
Judge Advocate General Ofc.
Department of the Army
901 North Stuart Street
Arlington, VA 22203-1837

Joan M. Griffin, Reg. Counsel
BT Government Relations
Suite 725, North Building
601 Pennsylvania Avenue, NW
Washington, D.C. 20004

Carrington Phillip, Atty. at Law
California Cable Television Assn.
4341 Piedmont Avenue
P.O. Box 11080
Oakland, CA 94611

Julia Russo, Executive Director
California Payphone Association
2033 N. Main St., Suite 1000B
Walnut Creek, CA 94596

Peter A. Casciato, Atty. at Law
Law Offices Of Peter A. Casciato
8 California St., Suite 701
San Francisco, CA 94111

Ellen Deutsch, Atty. at Law
Citizens Utilities Co. of Calif.
P. O. Box 340
Elk Grove, CA 95759

E. G. Black/M. Schreiber, Esqrs.
Cooper, White and Cooper
201 California St., 17th Floor
San Francisco, CA 94111

Judith A. Endejan, Atty. at Law
GTE California Incorporated
One GTE Place, CA500LB
Thousand Oaks, CA 91362-3811

M.Mates/ R.Goldberg, Attys. at Law
Graham and James
One Maritime Plaza, Suite 300
San Francisco, CA 94111

Joseph S. Faber, Atty. at Law
Davis, Wright & Tremaine
235 Pine Street, Suite 1500
San Francisco, CA 941042

Karen Wonnell
Bay Area Teleport
180 Grand Ave, Suite 2000
Oakland, CA 94612-3749

Stephen P. Bowen, Atty. at Law
Blumenfeld and Cohen
101 California St., Suite 4225
San Francisco, CA 94111

Charles Tievsky, Rgltry. Atty.
Cable & Wireless Communications
1919 Gallows Road
Vienna, VA 22182

Mission Telecommunications Group
Ednam Professional Center
2568 Ivy Road, Bldg. 3, Flr 1
Charlottesville, VA 22903

Alan Pepper, Esq.
Mitchell, Silberberg & Knupp
11377 West Olympic Boulevard
Los Angeles, CA 90064

Mary E. Wand
Morrison & Foerster
345 California Street, 30th Floor
San Francisco, CA 94104-2675

Terry L. Murray
Murray & Associates
101 California St., Ste. 4225
San Francisco, CA 94111

Robert J. Gloistein
Orrick, Herrington & Sutcliffe
400 Sansome Street
San Francisco, CA 94111

Ruth Day/Sandra Weiss
Government Affairs Department
Prodigy Services Company
445 Hamilton Avenue
White Plains, NY 10601

Robert J. Wullenjohn
California Public Utilities
Commission
505 Van Ness Ave., Rm. 5119
San Francisco, CA 94102

William G. Irving
County of Los Angeles
14585 Chimney Rock Road
Paso Robles, CA 93446

W. Harrelson/Mark Brown, Esqrs.
MCI Telecommunications Corp.
201 Spear Street, 9th Floor
San Francisco, CA 94105

Nick Selby
Law Offices Of
Earl Nicholas Selby
420 Florence St., Ste. 200
Palo Alto, CA 94301

Ann C. Pongracz
Sprint Communications Company
1850 Gateway Dr., 7th Fl.
San Mateo, CA 94404-2467

Michael Morris
Teleport Communications Group
One Bush St., Ste. 1350
San Francisco, CA 94104

Manning Lee
Teleport Communications Group
Teleport 1, One Teleport Dr.
Suite 301
Staten Island, NY 10311-1011

Thomas J. Long
Toward Utility Rate Normalization
625 Polk Street, Ste. 403
San Francisco, CA 94102

A. Kirk McKenzie
Administrative Law Judge
California Public Utilities
Commission
505 Van Ness Ave., Rm. 5041B
San Francisco, CA 94102

Keith J. Epstein
Pacific Bell Information Services
3401 Crow Canyon Road, Ste. 100
San Ramon, CA 94583

Richard M. Rindler, Esq.
Attorney for Metropolitan Fiber
Systems of California, Inc.
Swidler & Berlin, Chartered
3000 K Street, N.W., Suite 300
Washington, DC 20007-5116

Karen Jones, Telecom
California Public Utilities
Commission
505 Van Ness Ave., Rm. 3-D
San Francisco, CA 94102

John Gutierrez, Telecom
California Public Utilities
Commission
505 Van Ness Ave., Rm. 3-D
San Francisco, CA 94102

Lionel B. Wilson, Esq.
Legal Division
California Public Utilities
Commission
505 Van Ness Ave., Rm. 5026
San Francisco, CA 94102

Martin J. O'Donnell, DRA
California Public Utilities
Commission
505 Van Ness Ave., Rm. 4012
San Francisco, CA 94102

Jeffrey F. Beck
Karen Ackerman
Jellisa Bronfman
Beck & Ackerman
Four Embarcadero Center, Suite 760
San Francisco, CA 94111

Kent W. Hughes, Manager
Northern Telecom Inc.
P.O. Box 5070
San Ramon, CA 94583

Robert C. Lane, DSP
California Public Utilities
Commission
505 Van Ness Ave., Rm. 5119
San Francisco, CA 94102

Mark Hellman
Oregon Public Utilities Commission
550 Capitol Street, NE
Salem, OR 97310

ALJ Jacqueline Reed
California Public Utilities
Commission
505 Van Ness Ave., Rm. 5011
San Francisco, CA 94102

Danny E. Adams, Esq.
Brad E. Mutschelknaus, Esq.
Rachel J. Rothstein, Atty. at Law
Attorneys for Interexchange Access
Coalition
Wiley, Rein & Fielding
1776 K Street, N.W.
Washington, DC 20006

Daniel M. Waggoner
Davis Wright Tremaine
2300 First Interstate Tower
1300 S.W. Fifth Avenue
Portland, Oregon 97201

Carol Lam, Regional Manager
GTE California Incorporated
711 Van Ness Avenue, Suite 300
San Francisco, CA 94102

Dale Piiru
Division of Ratepayer Advocates
California Public Utilities
Commission
505 Van Ness Avenue, Room 4003
San Francisco, CA 94102

Ira Kalinsky
Division of Ratepayer Advocates
California Public Utilities
Commission
505 Van Ness Avenue
San Francisco, CA 94102

Teresa Marrero, Esq.
Teleport Communications Group
2 Teleport Drive
Staten Island, New York 10301

Carol Henningson/F. Pinigis
Southern California Edison Co.
P. O. Box 800, Legal D
Rosemead, CA 91770

Paul Jones, Sr. V.P.
Time Warner Communications
300 First Stamford Place
Stamford, CT 06902-6732

Brad Barnum
Calif. Pub. Util Commission
Office of Governmental Affairs
1227 "O" Street, Suite 404
Sacramento, CA 95814

David M. Wilson
Young Vogl Harlick and Wilson
425 California Street, Suite 2500
San Francisco, CA 94103

Kenneth Henderson
Director - CACD
CPUC
505 Van Ness Ave., Rm. 3209
San Francisco, CA 94102

City of Escondido Planning Division
Kristina Suszko
201 North Broadway
Escondido, CA 92025

James McVicar
Chief/Telecom/CACD
CPUC
505 Van Ness Ave., Rm. 3200
San Francisco, CA 94102

Virginia J. Taylor, Esq.
State of CA Consumer Affairs
Legal Affairs
400 R Street, Suite 3090
Sacramento, CA 95814

Thomas Corr, Esq.
1654 Lincoln Street
Berkeley, CA 94703

0043167.01

Thomas Bugbee
County of Los Angeles
P. O. Box 2231
Downey, CA 90242

Darlene Kiehl, Attorney
Wright and Talisman
Shell Building, Suite 225
100 Bush Street
San Francisco, CA 94101

Tom Miller
Northern Telecom Inc.
2305 Camino Ramon
San Ramon, CA 94583

Linda Madrid, Attorney at Law
Morley Mendelson
700 South Flower Street
Los Angeles, CA 90017

Barbara L. Snider, Esq.
Citizens Telecom
8920 Emerald Park, Suite G
Elk Grove, CA 95624

Thomas J. Burke
Manager -Revenue
Contel of CA, Inc.
5300 District Boulevard
Barkesfield, CA 93313

CO-CARRIER AGREEMENT

NOVEMBER 17, 1995

Pursuant to this Co-Carrier Agreement ("Agreement"), MFS Intelenet of California, Inc. ("MFS") and Pacific Bell ("Pacific") (collectively, "the Parties") will extend certain arrangements to one another within each LATA in which they both operate within the State of California, as described and according to the terms, conditions and pricing specified hereunder. This Agreement is an integrated package that reflects a balancing of interests critical to the Parties. It will be submitted to the California Public Utilities Commission as a compliance filing, and the Parties will specifically request that the Commission refrain from taking any action to change, suspend or otherwise delay implementation of the Agreement. So long as the Agreement remains in effect, the Parties shall not advocate before any legislative, regulatory, or other public forum that any terms of this specific Agreement be modified or eliminated. Notwithstanding this mutual commitment, however, the Parties enter into this Agreement without prejudice to any positions they have taken previously, or may take in the future in any legislative, regulatory, or other public forum addressing any matters, including matters related to the types of arrangements prescribed by this Agreement.

I. RECITALS & PRINCIPLES

WHEREAS, universal connectivity between competing common carriers is necessary for the termination of traffic on each carrier's network; and

WHEREAS, absent such connectivity the utility of communications services to individual consumers and to society as a whole would be severely and unnecessarily diminished; and

WHEREAS, the Parties should be able to efficiently, flexibly, and robustly exchange traffic and signalling at well-defined and standardized points of mutually agreed interconnection; and

WHEREAS, the Parties acknowledge that the terms and conditions herein represent a balancing of interests critical to the parties, and for that reason will, unless otherwise agreed, implement this Agreement as an integrated package without alteration of any material term or condition, or the inclusion or deletion of terms and conditions that would serve to alter a material term or condition herein;

NOW, THEREFORE, in consideration of the mutual provisions contained herein and other good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, MFS and Pacific hereby covenant and agree as follows:

II. DEFINITIONS

- A. "Automatic Number Identification" or "ANI" is a Feature Group D signalling parameter which refers to the number transmitted through the network identifying the billing number of the calling party.**
- B. "Calling Party Number" or "CPN" is a Common Channel Signalling parameter which refers to the number transmitted through the network identifying the calling party.**

- C. **"Central Office Switch", "Central Office" or "CO" means a switching entity within the public switched telecommunications network, including but not limited to:**

"End Office Switches" which are Class 5 switches from which end user Exchange Services are directly connected and offered.

"Tandem Office Switches" which are Class 4 switches which are used to connect and switch trunk circuits between and among Central Office Switches.

Central Office Switches may be employed as combination End Office/Tandem Office switches (combination Class 5/Class 4).

- D. **"CLASS Features" mean certain CCS-based features available to end users. CLASS features include, but are not necessarily limited to: Automatic Call Back; Call Trace; Caller ID and Related Blocking Features; Distinctive Ringing/Call Waiting; Selective Call Forward; Selective Call Rejection.**
- E. **"Commission" means the California Public Utilities Commission.**
- F. **"Common Channel Signalling" or "CCS" means a method of digitally transmitting call set-up and network control data over a special network fully separate from the public switched network elements that carry the actual call.**